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FACILITIES SUPPORT CONTRACTS

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By

CHARLES R. TURBANIC

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A REPORT PRESENTED TO THE GRADUATE COMMITTEE
OF THE DEPARTMENT OF CIVIL ENGINEERING IN
PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF MASTER OF ENGINEERING

UNIVERSITY OF FLORIDA

Spring 1986

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ABSTRACT

The primary function of this paper is to examine the various aspects of service contracts and to inform the reader how the Naval Facilities Engineering Command (NAVFACENGCOM) has expanded its role in the administration and surveillance of these unique contracts. More commonly known as facility support contracts, they encompass far more than the standard garbage collection and recurring maintenance tasks of yesteryear.

The paper will show how these contracts have grown in both number and dollars and look at the organization best suited to administer these contracts. In addition, the process for developing the performance work statements will be detailed and the various methods of contract surveillance will be studied to insure that the government is reaping the full benefits of its investment.

In the final chapter, the writer will draw his conclusions and make recommendations based on his knowledge and experience in the field of facilities support contracting. However, it should be noted that this paper does not establish contract policy and does not necessarily reflect the views of the Navy. If there are any conflicts between this paper and the Naval Facilities Contracting Manual, P-68, the Contracting Manual is to be followed.

CHAPTER ONE
INTRODUCTION

1.1 General Introduction

Knowledge of the Naval Facilities Engineering Command's (NAVFAC) prowess in the world of construction contracting is well noted. Traditionally, NAVFAC has had "cradle-to-grave" responsibility for the planning, design, and construction of facilities within the naval shore establishment. The construction efforts in Vietnam ($2 billion) and Trident Subase Bangor ($1 billion) are testimony to NAVFAC's achievements.[1]

An area of contracting which has not been so prevalent, but which NAVFAC is exerting a lot more attention, is the contracting out for services related to the operation and maintenance of its facilities. More commonly known as facility support contracts, they have generally been limited to such areas as janitorial services, grounds maintenance, and refuse collection. However, the nuber of service contracts awarded by NAVFAC has increased significantly in the past years and promises to continue growing in the future. This growth is attributed to civilian personnel ceiling restraints, changes in Real Property Maintenance (RPMA) requirements, in both volume and type of work, and to the Commercial Activity (CA) program. In particular, reemphasis has been placed on the old Circular A76 of the Office of Management and Budget, which decrees that government services that are contractable must be provided at costs competitive with the private sector, or be contracted out. Furthermore, some of the newer bases have embraced the concept of total base service contracts

and have implemented Base Operating Support (BOS) contracts while other shore activities have placed large portions of the public works effort under contract in order to maintain essential mission support capabilities.

In addition to the large growth in the number of service contracts, facility support contracting is uniquely different from construction contracting. Services are required on a continuous basis and at various locations, contractor's response to repetitive tasks is critical, performance criteria are difficult to define, and contract monitoring is crucial. The station is responsible for developing the specification and post-award contract inspection. NAVFAC is responsible for contract solicitation and award. This is justifiable in that maintenance service contracts impact in the day-to-day operations of the station; consequently the station must stay in tune with how the contractor is performing.

This dual responsibility of NAVFAC awarding the contracts and the station inspecting them has been the cause of much confusion and consternation in the past and yet the problem remains. Recognizing this fact, and in lieu of the ever increasing derendence on contracting, the need for a full time service contract manager (SCM) has been identified. Primarily, he will be responsible for bridging the gap between the station inspection responsibility and NAVFAC Contract authority.

NAVFAC has made great strides in attempting to overcome the many difficulties associated with the facility support contract (FSC) function but much remains to be accomolished. Proper staffing, quality inspection techniques, and proper training for all FSC personnel remain as unresolved issues. As expected, changes will be slow and through this period of transition and growth major claimant (resource sponsors) and command support and awareness is essential.

1.2 Types of Service Contracts

A service contract is one which calls directly for a contractor's time and effort rather than for a concrete end product.[2] Though the preceding definition may appear straight forward, the actual process of contracting for services can be both complicated and time consuming. Specification development is complicated by the fact that, in service contracting, there are five different contract types: firm-fixed price, open-end (indefinite quantity or requirements), time and material, fixed price incentive fee, and fixed price with quality performance.

Firm fixed price contracts provide a price which is not subject to adjustment for costs that a contractor experiences in the performance of his work. Though this type of contract places the maximum risk with the contractor, it also provides him with the maximum profit incentive. Firm fixed price contracts also carry the advantage of minimum administrative tasks for both the government and the contractor.[3]

Unit price contracts are a modified version of firm fixed price contracts. A firm price is established for a good or commodity but the actual amount of the procurement is left open.[4] Unit prices can be employed alone or in combination with lump sum fixed price items.

Perhaps the best definition of a time and materials contract would be one in the area of transportation maintenance. Generally, the quantity of repair work cannot be determined in advance to permit a fixed bidding price and so a contract for time and material is let and the contractor is paid accordingly.[5]

Fixed price incentive fee contracts are somewhat new in the area of government contracting and were primarily developed for contracting

of base operations support, more commonly known as the BOS contract. Essentially the government contracts for three major work elements. The first element is called Watch Standing and the government tells the contractor that for each specific work station a certain caliber of person is needed for so many hours a day. The second element is Performance; for example, the contractor is told that he must maintain a specific list of automotive equipment to a certain standard and it is up to him as to how he will do that. Finally, if the government cannot come up with a good performance specification, the contractor is asked to provide a certain number of people to meet a Specified Level of Effort. Here the government is buying people, not results. Once the contract is awarded, it shifts to a cost basis. If all work is performed satisfactorily and the cost comes in as expected, the contractor is paid his fee plus a pro-rated bonus.[6]

Fixed price quality performance contracts permit the payment of additional fees for exceptional performance. Generally, the government will limit this method of contracting to janitorial contracts or contracts where historically satisfactory performance has been difficult to obtain. Additionally, the maximum quality performance incentive fee is always stated prior to contract award to preclude disagreements upon contract completion.

1.3 Uses of Facilities Support Contracts/Contract Feasibility

Presently, NAVFAC awards approximately $800 million worth of maintenance service contracts encompassing a wide variety of contracts.[7] To be more specific, the following constitute the various areas of contractable services:

(1) maintenance, overhaul, repair, servicing, rehabilitation, salvage, and modernization or modification of supplies, systems and equipment

(2) maintenance, repair, rehabilitation, and modification of real property

(3) architect-engineering

(4) expert and consultant services

(5) services of Department of Defense sponsored organizations

(6) installation of equipment obtained under separate contracts

(7) operation of Government-owned equipment, facilities and systems

(8) engineering and technical services

(9) housekeeping and base services

(10) transportation and related services

(11) training and education

(12) medical services

(13) photographic, printing, and publication services

(14) mortuary services

(15) communication services

(16) test services

(17) data processing

(18) warehousing

(19) auctioneering

(20) arbitration

(21) stevedoring

(22) research and development

(23) consulting services, studies and analysis, and professional and management services.

As the above list is varied, it also is extremely attractive to those bases that have the funds but not the personnel to achieve their mission requirements. However, it should be with extreme care that the contracting function or privilege is not abused and that other avenues of work completion be thoroughly examined prior to making a decision to contract. The ultimate decision rests with the Public Works Officer (PWO) but there are some unique items to consider when choosing between in-house work and contract. These points are highlighted in Table 1.

As depicted, the decision to contract involves many factors and only after a careful evaluation should the decision to contract be made.

CONTRACT CRITERIA

Items to consider when determining whether to do work in-house or by contract:

1. Resources - Available - (in house vs. contractor)
   Personnel (vertical cut in Reduction In Force situation)
   Skill Level/Capability
   Special Equipment
   Material
   Funds

2. Time to complete work

3. Funding Pressures

   a. Maintain sufficient in-house work to meet payroll requirements.

   b. Utilize contracts to obligate funds at end of fiscal year.

4. Type of Work

   a. continuing

   b. one-time large jobs

   c. specialized

   d. easily defined

   e. easily inspected

5. Capital Investments Requirements

   a. reasonable for contractors to invest for a short term contract

   b. availability of funds for government to obtain the investments.

6. Costs/Economics of in-house/contract

   a. commercial/industrial review required by OMB Circular A-76

   b. in-house review

7. Amount of control required over the work

   a. mission essential

   b. high Command priority/interest

   c. impact of contractor strike

TABLE 1

1.4 Advantages/Disadvantages of Maintenance Service Contracts

As with construction contracts, the advantages of obtaining services by contract are fairly straight forward. Obligated funds are set aside and generally cannot be reduced in a budget crunch, cost savings are the norm, the contractor gives better response, the number of standing job orders are reduced, and most importantly, it allows the Public Works Officer (PWO) to shift the burden of scheduling and managing jobs to the contractor. In addition, it forces personnel to work on mission essential problems and gives the PWO more flexibility in his daily tasks. Of course these advantages rapidly wane in the face of a poor contractor so it is small wonder that contract award generates a great deal of interest at most establishments.

On the other hand, the disadvantages of service contracting are not so apparent and require further discussion. In construction contracting, the contracting officer relies to a great extent on the ability of the contractor to secure bonds as a measure of whether or not he is a responsible contractor. It is very difficult to get approval to incorporate bonds in a maintenance service contract. As a consequence, many "fly-by-nighters" have gotten into the service contracting business. Therefore, it is absolutely essential that the contracting officer conduct a thorough pre-award survey to determine whether or not the low proposer is capable of performing the work.

Specification preparation is another unique disadvantage in that the specifications must be responsive to what the customer desires. At the same time, it must be written in such a manner that makes it a legal and binding document. This is no easy task when specific services are

desired for if the specification is lacking, contract administration becomes a nightmare while the customer screams that he is not getting the services he is paying for.

Complicating matters further is the Commanding Officer (CO) who cannot understand why the leaves are not being raked daily and why the contractor cannot put a few extra men on to spruce up the base prior to the visiting dignitary's visit. What that CO has lost through contracting is the flexibility of his personnel and he generally takes out his wrath on the nearest contract administrator.

Finally, and perhaps the biggest drawback to these types of contracts is the constant turnover of contractors and their personnel. By law, maintenance service contracts may be for any period not to exceed one year and may include an option to extend for one additional similar period.[8] What this generally means is that most service contracts are renewed every two years and consequently, contractors are coming and going at an alarming rate. What generally happens is that the "old" contractor shows a decline in service his last three months that he has the contract while the "new" contractor performs inadequately his first three months while he is setting up shop and learning the ropes. Functionally, it becomes a huge problem while the administrators take deductions, acclimate the new contractor, threaten the old contractor, and try to pacify the customer who is not getting the level of service that he is paying for.

Service contracting then remains a perplexing dilemma. While the rewards appear fruitful and bountiful, there is another side that must be considered. In short, service contracts require special consideration and careful watching else they become unmanageable.

CHAPTER TWO
ORGANIZATIONAL STAFFING

2.1 General Overview

Figure 2-1 depicts graphically the role of the three branches of the Federal Government with respect to the establishment and review of contracting regulations, policies, and procedures. In addition, numerous laws, regulations, and manuals provide additional guidance for the use of government contracts. A detailed discussion of these policies and directives is not within the scope of this paper; however, it is important that the reader understand where contract authority originates before studying the service contract organization.

Figure 2-1 shows that contracting authority is generated through the Executive Branch of the Federal Government and thus NAVFAC (see Figure 2-2) becomes the focal point for the various field divisions and contract offices. NAVFAC provides support to the Navy and Marine Corps with regard to shore facilities and related engineering material and equipment. In addition to repair, maintenance, and construction projects, NAVFAC is responsible for many diverse elements from automotive, weight handling, and fire fighting equipment, to materials for shore defense against chemical warfare. Technical and managerial assistance is provided to field activities for operation and maintenance of Naval facilities.

In addition, NAVFAC functions as a contracting agent for major claimants such as U.S. Atlantic Fleet and U.S. Pacific Fleet. Major

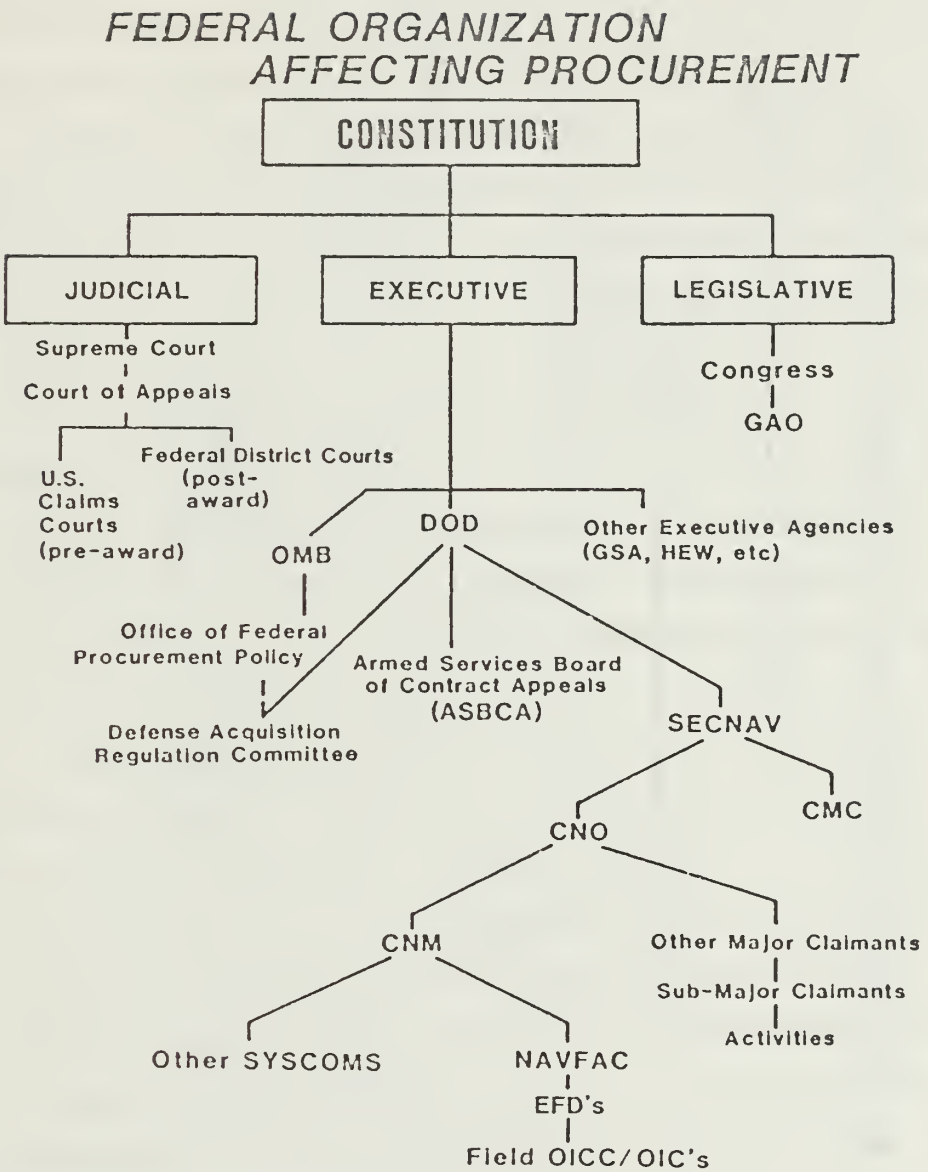

Figure 2-1
(See Reference 2)

NAVAL FACILITIES ENGINEERING COMMAND HEADQUARTERS

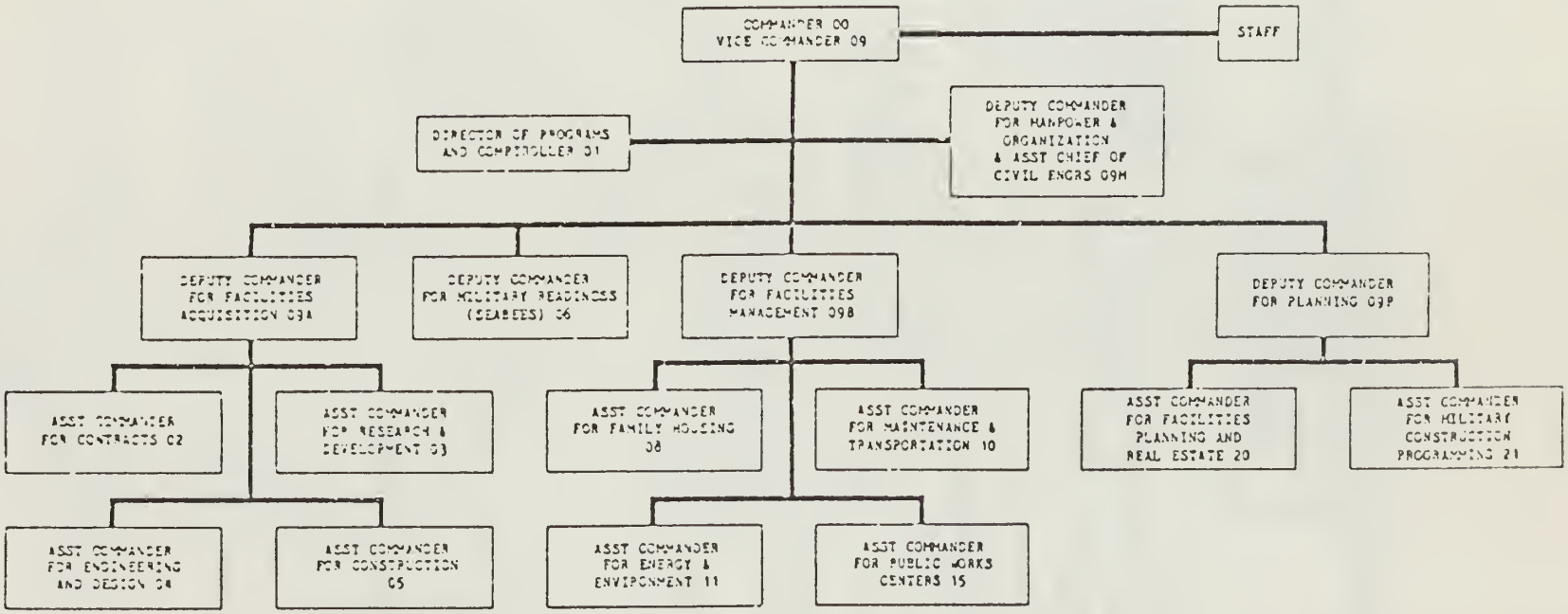
COMMANDER 00
VICE COMMANDER 09
STAFF
DIRECTOR OF PROGRAMS AND COMPTROLLER 01
DEPUTY COMMANDER FOR MANPOWER & ORGANIZATION & ASST CHIEF OF CIVIL ENGRS 09M
DEPUTY COMMANDER FOR FACILITIES ACQUISITION 09A
DEPUTY COMMANDER FOR MILITARY READINESS (SEABEES) 06
DEPUTY COMMANDER FOR FACILITIES MANAGEMENT 09B
DEPUTY COMMANDER FOR PLANNING 09P
ASST COMMANDER FOR CONTRACTS 02
ASST COMMANDER FOR RESEARCH & DEVELOPMENT 03
ASST COMMANDER FOR FAMILY HOUSING 08
ASST COMMANDER FOR MAINTENANCE & TRANSPORTATION 10
ASST COMMANDER FOR FACILITIES PLANNING AND REAL ESTATE 20
ASST COMMANDER FOR MILITARY CONSTRUCTION PROGRAMMING 21
ASST COMMANDER FOR ENGINEERING AND DESIGN 04
ASST COMMANDER FOR CONSTRUCTION 05
ASST COMMANDER FOR ENERGY & ENVIRONMENT 11
ASST COMMANDER FOR PUBLIC WORKS CENTERS 15

Figure 2-2
(See Reference 2)

claimants and their field activities are responsible for the maintenance of their shore facilities. NAVFAC provides them the technical guidance and contract support to assist in carrying out this responsibility.[9]

Moreover, NAVFAC has also established six Engineering Field Divisions (EFD's) as its primary field organizations. Officers in command of EFD's have been delegated contractual authority to award most NAVFAC contracts without prior approval. As shown in Figure 2-3, the various EFD's are organized to provide maximum support and guidance in many diverse areas. The head of the Acquisition Department, 09A, is responsible for all contract functions except those pertaining to utilities and real estate purchasing. Within the Facilities Management Department, 09B, the Maintenance Division (Code 10) has principle interest in maintenance service contracting. This division acts as a focal point for the Public Works activities in the EFD's geographic area of responsibility.

Though this arrangement has proved adequate in the past, the dramatic growth in service contracts has brought about the need for a more responsive organization. Recently, Code 10 (from the 09B organization) and Code 02 (from the 09A side) have been at odds over who has the ultimate responsibility for service contracts. What has traditionally been Code 10's responsibility has now generated 02's attention because of the numerous contractual problems that are being generated by the various Public Works organizations. To date, this problem has yet to be resolved.

2.2 Organizational Guidelines/Staff Responsibilities

As stated earlier, the tremendous growth in service contracts has generated the need for full time inspection and administration of

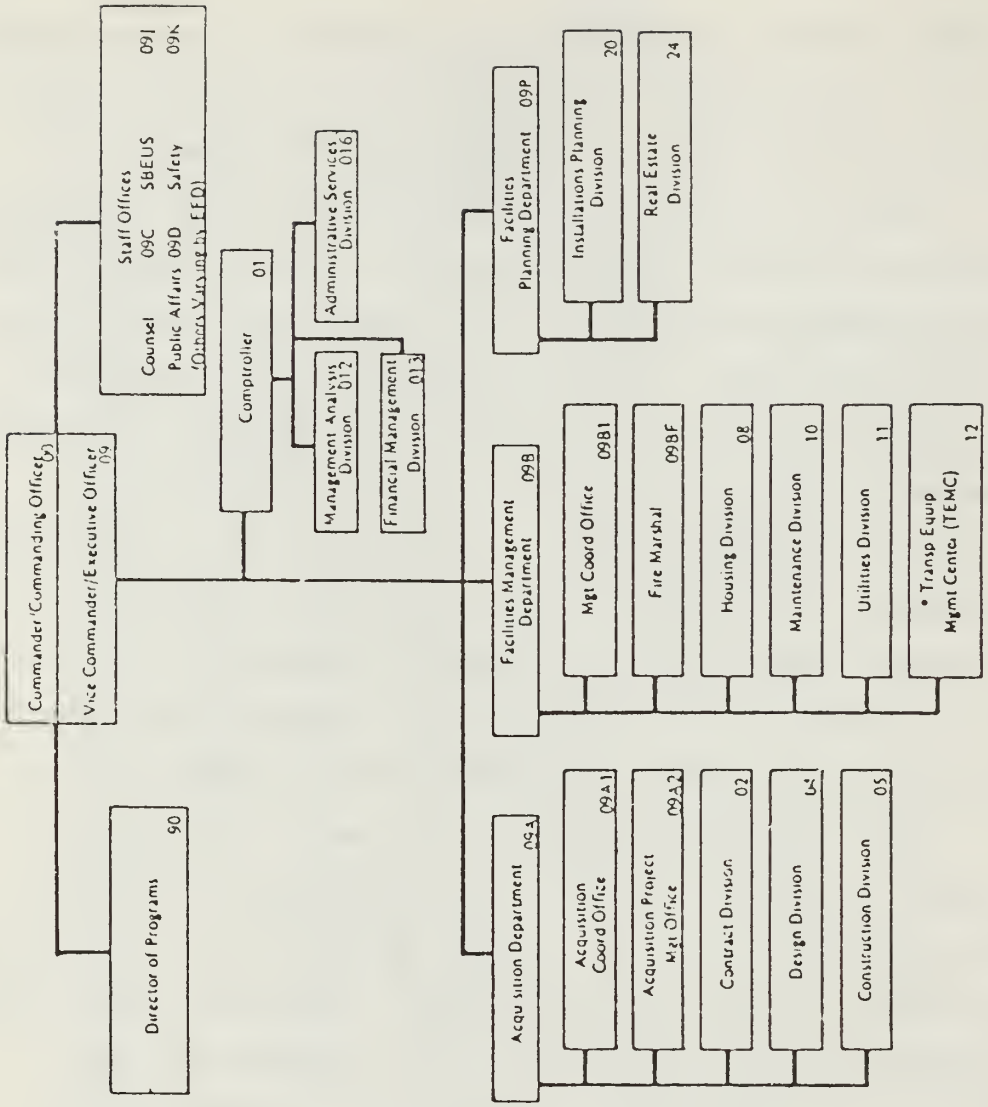

Figure 2-3 Engineering Field Division
(See Reference 2)

facility support contracts. Several unique duties are required with respect to service contracting and the execution of these duties requires specific skills and knowledge. Depending on the activity's size and involvement with service contracts, multiple duties may be assigned to one person. However, for purposes of discussion Figure 2-4 illustrates the ideal FSC organization for a Public Works department that has numerous service contracts. Outlined below are the respective duties of each individual.

Officer in Charge (OIC): The OIC is delegated contract authority by the "Contracting Officer", Commander, NAVFAC.

The OIC is responsible to the contracting officer to insure that all aspects of the contract, its administration, management, and surveillance are in accordance with the Federal Acquisition Regulations (FAR), NAVFAC Contracts Manual (P-68), and other regulations that may apply. He is also responsible for the preparation of the final contract document and conducts the solicitation, evaluation of bids, and award and post-award administration.

Assistant Officer in Charge, Facilities Support Contract (AOIC, FSC):

The AOIC FSC is an individual military officer designated by the OIC who is responsible for post-award management of the contract. In some cases, he is also responsible for pre-award functions, negotiation of change orders, coordination with Quality Assurance Evaluators (QAE's), makes recommendations to the contracting officer, and provides liaison with all customers.

Service Contract Manager (SCM): The SCM is that person with direct responsibility for day-to-day management of the service contract. Prior

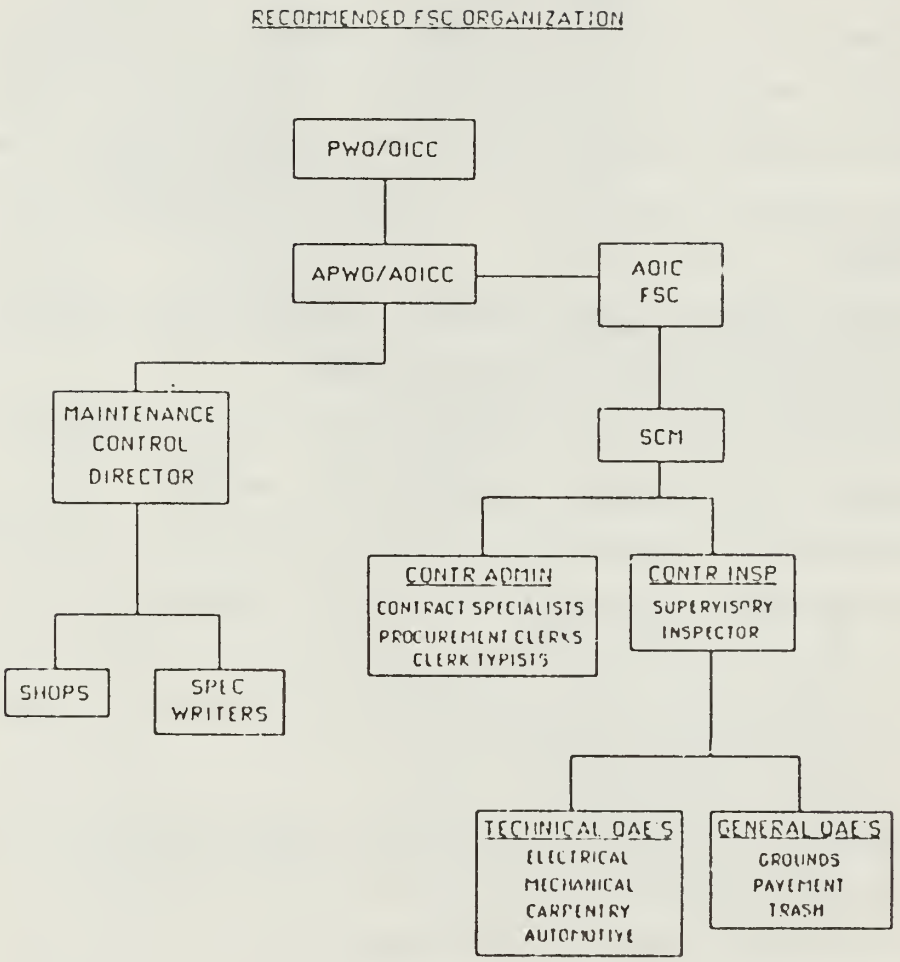

Figure 2-4
(Philadelphia Naval Shipyard FSC Structure)

to award he is responsible for assisting in the preparation of the statement of work, the government estimate, and the surveillance plan. Post-award responsibilities are to insure that the contract runs smoothly and is properly managed, that surveillance is conducted and documented, that contract working files are maintained, and that work orders are properly coordinated with the AOIC FSC. If change orders are required he makes recommendations to the AOIC FSC; if the contractor is having problems, the SCM must recommend the appropriate action in matters involving quality, time, money, or safety. He must also coordinate matters of contract interpretations with the contractor, the contract specialist, and the AOIC FSC. The SCM also has technical control and supervisory responsibility for the Quality Assurance (QA) program. In short, the SCM is the key to successful operation of the Facilities Support Contract division.

Supervisory Inspector: During the contract period, this person has the responsibility for monitoring the overall performance of the contractor and recommending any changes as necessary. He also assigns QAE's to specific contracts, makes recommendations as to the appropriate use of government or contractor furnished equipment, and acts as liaison with customers, QAE's, and contractor personnel.

Quality Assurance Evaluator (QAE): The QAE is responsible for monitoring the contractor's performance. The QAE works under the Supervisory Inspector's direction and has the appropriate technical expertise to adequately inspect the contractor's work. QAE's are responsible to the customer to insure that the work meets his needs and to the SCM to insure the work is accomplished in accordance with the

contract requirements. The QAE also prepares QA plans and is responsible for the documentation of surveillance and evaluation of work performed. QAE's do not administer contracts but rather assist the Service Contract Manager through the verification and documentation of the performance of the contracts. Competent accomplishment of QAE functions requires in-depth knowledge of the function being evaluated, detailed knowledge of the contract specification, and general knowledge of contract administration procedures.

Contract Specialist: The Contract Specialist works for the AOIC FSC and performs most pre-award functions. This person is also responsible for assembling service contracts and insuring these contracts meets the customer's needs. In addition, the Contract Specialist assists in change order negotiations, advises the QAE on the appropriate deductions for nonperformed work, and advise both the SCM and AOIC FSC on appropriate contract procedures.

Specification Writer: The Specification Writer is the person located at the activity and under control of the Maintenance Control Director (MCD) who is tasked with preparation of the contract specification. This person must have a good knowledge of the functional area and specification requirements. Customer liaison is also important in that the customer's request must be reflected in the statement of work.

Procurement Clerk: The procurement clerk performs most post-award and some pre-award functions. This person acts as the recorder at bid openings, prepares service contract correspondence for the SCM and AOIC FSC, and maintains the required contract files.

2.3 Staffing Guidelines

Though Figure 2-4 gives a broad outline on the recommended organization for the FSC function, no one solution will be adequate for every situation. Each base or facility has its own unique characteristics and thus each Public Works Officer (PWO) will have to staff his organization as he deems necessary. Without question though, the role of the SCM remains a vital component within the FSC department and careful selection of this individual cannot be overemphasized. The SCM should have a broad and varied background in all areas of contracting and be especially proficient at expressing himself in writing. In addition, he must be equally adept at dealing with his customers and acting as liaison between the Public Works organization and the various departments and facilities that are common to all Navy shore establishments.

Obviously the level of staffing will vary from base to base and depends on contract complexity, total contracts in place, and the total dollar value of the individual contracts. Generally, two or three contract specialists are more than adequate at most facilities but the number of QAE's remains the critical element in determining the success of any FSC organization.[10] In the past, end strength numbers and budget limitations have limited this number at most installations. Ideally though, the appropriate number of QAE's can be determined mathematically by a formula developed by the Air Force. Simply stated, the formula[11] is as follows:

$$\text{\# QAE's} = Y/144$$

where $Y = 69.74 + .1826\ (X_1) + 7.88\ (X_2)$

X_1 = Total contract value in thousands of dollars

X_2 = Total number of contracts

Thus, it is obvious that the number of QAE's should only be limited by the total value and number of contracts in place. Anything less compounds the problems of everyone in the FSC organization and increases the potential for contract abuse, dissatisfied customers, and in most cases, shoddy workmanship by the contractor.

Therefore, it should be readily apparent that the staffing level of QAE's is a highly critical element in service contracting. Careful consideration should be given to this area and all Public Works' departments must remain flexible enough to expand their resources here as the number of service contracts continue to grow.

CHAPTER THREE
SPECIFICATION GENERATION

3.1 General Overview

A specification, also referred to as a Statement of Work (SOW), is a document used to describe procurement requirements for goods and services.[12] SOW's are of two types: Performance Work Statements (PWS's) which require the contractor to be responsible for work management and other work statements in which the government retains work management responsibilities. In most cases, the former is the preferred since it places more emphasis on contractor performance and reduces the likelihood of claims against the government. However, there are specific instances where the government may wish to maintain tighter controls on the contractor and thus the government controlled work management PWS remains a viable alternative. However, extreme caution is the guideline since the government may not contract out for the services of people who receive their assignments from government personnel or work under the direct supervision of government personnel. Where the need arises for services of this fashion, the government must hire people directly and in accordance with the Civil Service Laws.

Essentially then, the PWS must ask for a finished product and the contract administration must be written in such a way that the control and supervision over the work remains solely with the contractor. In other words, if the government wants a building painted, it defines the job, lets the contractor paint the building as he sees fit, and then

accepts it or rejects it solely on the basis of the job meeting the contract specifications. This would be a perfectly legal contract for a finished product. On the other hand, if the contractual arrangement with the painting contractor is such that he is really only providing painters who are directed and supervised by government personnel, then the contract would be for personal services and thus illegal. In that case, the government would, in effect, be "hiring" employees without regard to the Civil Service System. That it may not do and that is the reason all service contracts must provide for a clearly defined task of job. Thus, the generation of the PWS remains a highly critical step in the procurement of services not only for accomplishment of the job but to preclude any possibility of illegal contracting methods.

3.2 Specification Development - Systematically

The actual development of the specification is a multi-step process and one that involves careful planning and cooperation by a host of individuals. As a particular work request is processed and the determination is made that the services of a contractor are required, close liaison with the customer and specification writer becomes essential. In addition, the Service Contract Manager (SCM), the Contracts Specialist, Quality Assurance Evaluators (QAE's) and other advisory personnel from the local Engineering Field Division (EFD) should all be consulted for their inputs and guidance.

As the results of the combined knowledge of the above mentioned players are tabulated, the development criteria will take a standard form and should include, as a minimum, the following:

CONTRACTOR OPERATED SYSTEM

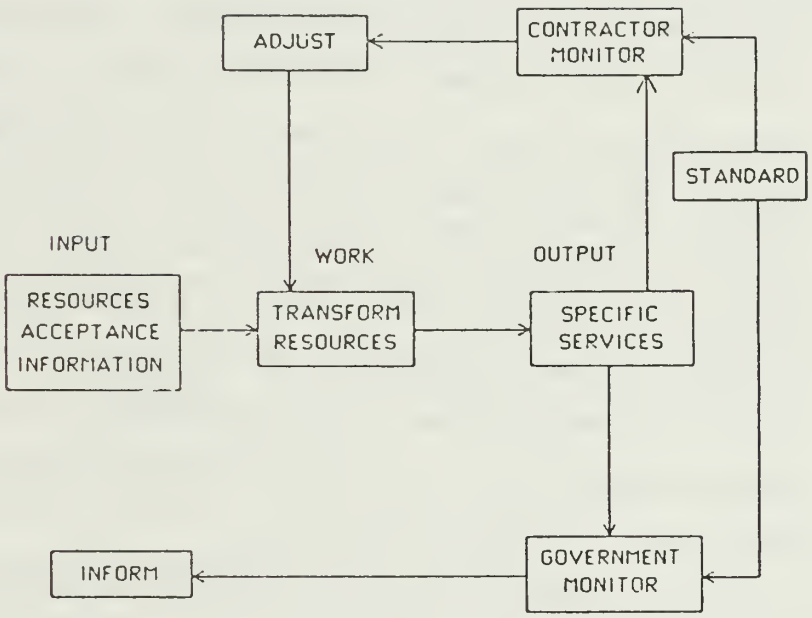

Figure 3-1
(See Reference 6)

into small parts called vehicle operations, vehicle maintenance, and traffic management. Further, each of these parts could be broken down into subparts such as vehicle dispatch, specific repair services, and rush hour congestion respectively.

Therefore, a proposed contract effort must be viewed in a systematic way to determine an output or performance oriented SOW and a means of measuring the service. A systematic or systems approach to an analyses will result in an enforceable, clear PWS. It will also produce quality assurance plans that tell the government if services are provided as specified. Further, a systems approach permits the specification writer to identify outputs and separate them from the specific procedures required to create these outputs. When the government specifies a given procedure, it assumes responsibility for insuring that the procedure will result in the required output. On the other hand, if it specifies the output performance and its quality standard, the contractor must determine how to achieve that level of performance.

Lastly, systematic analyses will identify the input needed to get a job done. These data are most useful in analyzing a contract bid price, conducting a pre-award survey, creating a government furnished property list, and making payment deductions in case of non-performance.

3.3 Writing the Specifications

With the systematic approach properly defined the actual task of generating the PWS becomes a fairly straight forward operation. The specification writer must first collect as much information and data on the subject as possible and then determine which portion of the studied function will be contracted and which will remain to be accomplished by

in-house forces. Systematically the specification writer will start with how the job is to be done and will end with the performance required of the contractor. Functionally, the process will proceed as follows:

a. Organizational Analysis: functional requirements are reviewed and identified and a determination is made on how they are to be accomplished.

b. Tree Diagram: A tree diagram is prepared that will divide a job into smaller and smaller parts. Each part thus brings about a final result or service.

c. Task Analysis: Each part of the tree diagram is divided into input, work, and output: input is what is needed to do the job; work is the steps needed to do the job; output is what the work produces. During this phase, the specification writer also decides, with the advice from management, what outputs the contractor will provide and what work will remain in-house.

d. Performance Analysis: Each proposed service that will be contracted is assigned a performance value. The writer will work with technical representatives to determine how the service will be measured, what standards apply, and what the acceptable quality level should be.

e. Resource Analysis: Once the contracts supplied services are picked from the tree diagram, resources are analyzed to determine workload data, equipment requirements, facility requirements, and material usage data. This information is then used to determine which items will be government furnished and which are to be contractor furnished.

f. Directives Analysis: Once again the specification writer and technical advisors determine what directives (manuals, instructions, etc.) apply and then these directives are either classified as mandatory or advisory.

g. Cost Analysis: Here the writer works with the engineering department to prepare the estimated cost for the service. These costs are used to determine the reasonableness of the bid, as a basis for negotiations, or as a guideline for deductions for services not provided.

Once the basic steps are completed, the specification writer and upper management must now focus their attention on the level of performance desired. Obviously, the level of performance required of the prospective contractor will vary directly with the amount of resources or funds that are available. If resources are not sufficient for the desired level of performance then the performance requirement must be "tuned down" to fit the available funding. It goes without saying that the customer must be notified of any important changes and kept fully advised of any significant changes. Conversely, if it is determined that surplus funding will be available the customer may well decide that he can afford increased services. In any case, the decision on what level of performance to be utilized must be made here and with complete acceptance by the customer to preclude unnecessary problems in contract administration.

Upon completion of this process the specification writer and contract specialist will confer and determine the contract type best suited to complete the services being procurred. Without question the OIC, EFD advisory personnel, and the Navy Contracting Manual, P-68, should be consulted and studied to insure the legality of the proposed contract. Generally speaking, the fixed-price lump sum contract (see Chapter One) is best suited to complete most service type requirements.

3.4 Surveillance Tie In

Just as the job analyses steps were carried out to gather data for the SOW so too is this process used in writing the surveillance program. If the job analyses has been properly completed, the concurrent writing tasks will be relatively easy. In this case, concurrently means that neither task is truly independent; what is written into the PWS influences what is put into the surveillance program. Likewise, the surveillance program will force the writer to make sure that outputs and procedures in the PWS are measurable.

Keep in mind that the surveillance program is a document used to make sure that systematic quality assurance methods are used. It assumes that the contractor is responsible for managing and controlling the output of his services while the government surveillance program ensures that contractor-provided services meet quantity and quality standards. The development of this program then involves these major steps:

a. Identifying Key Performance Indicators: While the job analyses phase identified many performance indicators, not all of these can be classified as critical to the evaluation of services provided. During this step the analyst must decide which indicators to include, using as criteria the importance of the process and its output, the availability of Quality Assurance Evaluators (QAE's), and the related ability of alternative indicators to provide a back up.

b. Establish Quality Assurance (QA) Procedures: One or more methods should be used in monitoring contractor performance. For example,

existing management information systems should be supplemented by random sampling of customer complaints.

Once these procedures have been outlined and incorporated into the specification, surveillance becomes a much more efficient process. Here the contract inspection branch can draw random samples and develop their own quality assurance inpections based on the criteria provided in the surveillance program. Thus, the whole basis of contracts provided services remains keyed to established guidelines that have been set forth in the PWS and the surveillance program. If done properly, proper contractor performance will become a reality and the customer will attain the satisfaction he desires.

CHAPTER FOUR
QUALITY ASSURANCE METHODS

4.1 General Overview

When the government purchases goods and services, there must be some means provided to attest to the value received for monies spent. To do this, the government must be able to confirm that the quantity and quality of goods or services received conforms to contract requirements. The recipient of these contracted goods or services, the customer, is entitled to quality workmanship and adequate services and it is the responsibility of the Service Contract organization to see that he gets them. Thus, the government remains responsible for the development and implementation of procedures to attain this goal which is more commonly referred to as quality assurance (QA). Contractors, on the other hand, are responsible for providing quality control (QC) which insures that the desired level of output quality is maintained.

The Navy's traditional approach to surveillance of Service Contracts, often a hit-or-miss affair with no written plan, has not provided adequate quality assurance. As an example, the method of surveillance which is claimed to be used most frequently is 100 percent inspection. In reality, however, the inspection is often much less than total, since 100 percent inspection is very costly and not always feasible.

Further, traditional surveillance methods have usually focused on the work process rather than on the quality of contractor outputs. As

stated previously, this borders on the illegalities of personal services and also does not assure satisfactory quality performance.

However, a new QA approach, based on a written plan, is keyed to performance oriented specifications. It focuses on the quality of the product delivered by the contractor and not on the individual steps or procedures used to provide that service. In addition, it also includes the use of preplanned inspections, validation of complaints, and unscheduled inspections that provide the structural approach necessary to achieve good QA.

4.2 Criteria for Good QA

To achieve good QA, several criteria must be met. First, the PWS must be written so that the quantity and quality of required work outputs are measurable. The development of the PWS and the QA plan, as indicated in the previous chapter, should be viewed as a single interrelated process. While the PWS defines work outputs and quality standards, the QA plan defines how the work outputs will be observed and measured. In addition, QA must provide for both adequate and affordable contract surveillance. It goes without saying that the depth and detail of the surveillance should be geared to the importance of the services provided. Also, the proper QA will have the potential to support corrective actions initiated by the Service Contract Manager (SCM) when non-performance or unsatisfactory performance occurs.

To achieve proper contract surveillance is no simple task but the dominance of three essential elements -- outputs, compliance, and problem causes -- provide the key ideas in attaining proper contract monitoring.

Quality Assurance will always evaluate the output service or product provided by the contractor. This output service results either from contractor developed procedures or from government specified procedures. In outputs based on procedures developed by the contractor, the procedure is examined on an exceptions basis. That is, the government becomes concerned only when the provided services are not adequate. In government specified procedures, compliance of the procedure is the desired output.

The second dominant element is contract compliance. The degree of contractor compliance is monitored through the performance indicators and standards generated in the PWS. Performance indicators are measurable attributes of the outputs while the standard is the gauge that is used for comparison. As an example, scheduled trash collection would be the work required, an indicator of good performance would be timeliness, and the standard would be that trash is to be picked up within 4 hours of the scheduled time.

Lastly, problem causes should be closely scrutinized. When the observed performance show there is poor compliance with contract requirements, the Quality Assurance Evaluator (QAE) must identify the source of the problem. The QAE will look beyond the outputs and determine if the problem is caused by the government or the contractor. If the cause of the problem rests with the government, corrective action is initiated and no response is required of the contractor. However, if the contractor is found to be at fault, he is told to take corrective action. Payments can be reduced or withheld by the government, and possible default proceedings can be initiated in cases of severe non-compliance.

4.3 Methods of Surveillance

Though many managers feel they have adequate contract surveillance and that their methods are foolproof, there are really only five proper methods in judging a contractor's performance. Keeping in mind that each has its own unique advantages and drawbacks, and each has its own applications, no one method can be adequate in all situations. These five methods then are as follows:

1) One Hundred Percent Inspection: This method requires that outputs from each and every work occurrence be evaluated.

One hundred percent inspection measures the contractor's true level of performance but it is extremely expensive and time consuming and should be used sparingly, if at all.

2) Planned Sampling: Surveillance by this method is designed to evaluate a part but not all of a contract requirement. The number of inspections and the items to be inspected are a judgement matter. Planned sampling is useful when requirements at one location are more important than those at other locations or if the contractor's performance is poor is some spots but better in others.

3) Random Sampling: Surveillance based on random sampling evaluates a portion of the work performed. In using this method any occurrence of work is as likely to be monitored as any other since all occurrences are assumed to have the same level of importance. This method will estimate the overall level of contractor performance and is most useful in evaluating items of a repetitive nature such as janitorial work, grounds maintenance, and service call work.

4) Validated Complaints: Validated customer complaints constitute a method based on customer awareness. Customers notify the QAE when there is a case of poor or non-performance and the QAE then validates the customer complaint. Good documentation and validation remain the key here but care should be utilized since customer complaints can be proven invalid if the customer is poorly informed on actual contract requirements.

5) Unscheduled Inspections: The QAE may conduct impromptu evaluations of contract requirements whenever necessary. However, this method provides no information on the overall contractor's performance and thus should be utilized with other methods such as customer complaints.

As stated previously, no one method will cover all requirements and thus no firm guidance can be given. Methods utilized should be left to the discretion of the Officer in Charge (OIC) or Service Contract Manager (SCM) since these individuals are in the best position to make that judgement. Frequency of service, importance of service, available assets, and internal requirements of the contract division all bear an equal importance in deciding which surveillance method to use. In addition, knowledge of the contract and capabilities of the specific contractor are best known by the OIC and SCM and thus their decision on the surveillance method utilized is critical in attaining good contractor performance.

4.4 Role of the Quality Assurance Evaluator (QAE)

The key to assuring satisfactory performance from service contracts is adequate government surveillance of contractor performance.

Hit-or-miss surveillance by untrained personnel is an invitation to poor performance. The more prone a particular type of work is to shoddy performance, the more necessary it is to assign an adequate number of trained and qualified personnel (QAE's) who are familiar with the contract surveillance. The QAE is the key person in service contract management. He serves as the eyes and ears of the SCM and as such must demonstrate a large degree of common sense since many facets of the job are subjective and open to criticism.

Additionally, the key input to surveillance is contract requirements. These requirements will dictate what work the contractor is to perform and what the QAE is to evaluate. Next in importance is the contractor's work schedule. This schedule is necessary in order for the QAE to know when work, not scheduled by the contract requirements, is to be performed. The intensity of surveillance is influenced to a degree by the contractor's past performance. During the surveillance period the number and type of customer complaints received will affect the QAE's schedule.

Once the surveillance period is completed, the QAE must document his results so that they can be analyzed and a determination made as to the overall performance of the contractor. Documentation cannot be over emphasized and it is the direct responsibility of the QAE to ensure adequate information is available to both the OIC and SCM so that they can make a thorough evaluation of the contractor.

Based on this evaluation there are several courses of action that may be taken. First, deductions must be made for all observed and documented cases of non-compliance, regardless of the contractor's overall level of performance. Other specific actions that may be taken include issuance of a Contract Discrepancy Report (CDR), Cure Notices

or Show Cause notices in accordance with the Navy Contracting Manual, P-68, or contract termination if sufficient cause exists. Regardless of the course of action, good documentation by the QAE is required.

To attain proper surveillance, the QAE's must have qualifications in both the technical aspects of the contracted function and contract inspection techniques. Technical expertise is generally attained by selecting personnel who have the proper background and experience in a certain profession. Figure 2-4 details the proper mix of QAE's in the professional areas. Though most QAE's have vast experience in their particular profession (a very important selection criteria) they are generally lacking in contract surveillance techniques. This can be remedied by training which is available through most Engineering Field Divisions (EFD's) and through proper guidance by the supervisory inspector and SCM.

As a final note, the QAE must also be a unique individual in that he represents both the government and the contractor. While his main tasks are to ensure that the government is getting its money's worth, he must also represent the contractor in cases of poorly defined work requirements, acting as liaison for the contractor in resolving work scheduling conflicts with customers, and in settling disputes in the case of uninformed customers who sometimes insist the contractor is not performing adequately. In addition, both the OIC and SCM depend a great deal on the QAE in evaluating a contractor's performance since the QAE is the one person who knows both the contractor and the contract requirements, customer needs, and any extenuating circumstances that may be involved.

The QAE then is the jack-of-all-trades in that he is the inspector for the government, the representative of the contractor, a monitor for labor, safety and security practices, and often the coordinator of government furnished space, material, or utilities. His selection and training are critical to the success or failure of any contract administration division. By virtue of his position, he can often overcome a poorly defined PWS and make the contract a success when failure would be imminent if not for his personal attention and expertise. Thus, the QAE remains as the single most important element in the administration of government service contracts.

contracts will remain as a source of consternation to both customers and administrators.

As shown, a unique problem exists in the service contract community in that bonding requirements, both performance and payment, are extremely difficult to implement in a service contract. The results have been catastrophic in that many poorly performing contractors routinely submit the lowest bids, are awarded the contract, and then fail to perform adequately which leaves most Public Works Officers and their staffs without the proper support. The answer lies within the Small Business Administration (SBA) in that they perceive service contracts as a portal for their clients without regard to these contractors' ability to perform. NAVFAC must negotiate with the SBA and overcome this flaw. Performance and payment bonds do not guarantee problem free contracts but they do provide an option for the Public Works Officer in cases of poor or non-performed work.

Additionally, the service contract organizations face a unique problem in the areas of high contractor turnover. Most service contracts, by law, are implemented in one year cycles with the government having the option of extending these services for an additional term. This restriction makes it extremely difficult to achieve continuity of service in that contractors are coming and going at very short intervals. As most contractors and their employees suffer through the learning stage of determining localities and unique contract requirements, their provided service suffers. Moreover, when a contract nears completion, especially when the incumbent knows he will not be returning for an additional term, his performance again declines and the customer remains

unsatisfied for he does not get the level of service he is paying for. Deductions do not always remedy this predicament and since default requirements are so involved, the administration of this particular contract becomes a lesson in futility.

The short term contracts also effect the in-house workload in that new contracts must be constantly written and old ones updated. This adds to the specification writer's already large backlog and often jeopardizes service to the customer. In the case of trash collection or janitorial services, the break in service would be untenable at best.

Of course the obvious solution is to extend the term of the various contracts and give the government the right to terminate or add option years as it deems necessary. A five year janitorial services contract with a yearly option to extend clause would not only decrease the backlog in specification generation but provide contractors with an incentive to perform. However, until this problem is eradicated service will continue to suffer with the brunt of the customer's ire being absorbed by service contract personnel.

Traditionally, the EFD's Code 02, under direction from the 09A (see Figure 2-3) has had the responsibility of contracting with the private sector. On the other hand, Code 10, under direction from 09B, has had cognizance over facilities management. This situation worked well when most facilities' maintenance and service was provided by Civil Service workers but that is no longer the case. As more and more facilities maintenance tasks have been contracted out, Code 10 and the 09B organization have become more involved in the contracting process. This has generated a great deal of conflict within the various EFD's, as well as NAVFAC itself, and no solution is yet in sight. This

As a final note the role of Facility Support Contracts cannot be over emphasized; changing requirements have dictated this and a return to yesteryear of accomplishing maintenance and service functions with in-house forces will never occur. New techniques and innovative ideas have thus far been adequate with meeting the challenge of increased requirements. However, as requirements continue to escalate much more remains to be done. The factors outlined in this paper are not the cure all as they represent only one opinion and are surely not adequate for all situations. I am confident, however, that these thoughts and ideas are pertinent and can only improve the Navy's role in the area of Facility Support Contracts.

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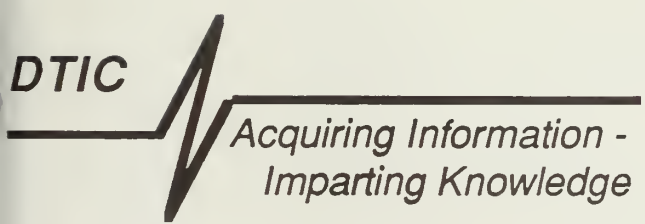

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